ADEQ Water Quality Division (WQD) SFY16 EOY Assessment

The following summary reviews ADEQ's performance for State Fiscal Year 2016 (SFY16). The evaluation is based on commitments in the workplan, reports/submittals and considered information gathered during ongoing program conference calls.

Administration

Revenue: ADEQ Water Quality Division (WQD), hereafter "ADEQ", lost fiscal/general fund support from the state legislature in 2008 and relies heavily on federal funds to operate. Federal funds (\$10M+) represent more than 50% of ADEQ's operating budget. ADEQ receives approximately \$4.8M annually through several EPA grants to implement water programs, excluding the State Revolving Funds. ADEQ also collects AZPDES permitting fees and began collecting operator certification fees in SFY16.

Workplan and Grants: The bulk of federal funding is awarded annually through a Performance Partnership Grant (PPG) which combines CWA 106, PWSS and NPS funds. ADEQ also receives a separate monitoring grant and NPS projects grant. ADEQ develops an annual integrated workplan covering all activities and commitments for federally and non-federally funded tasks, and is based on a SFY (July 1- June 30). The draft workplan is reviewed by the relevant program leads and managers (Water and Enforcement), and followed by discussion/negotiations (in some cases, formal meetings). Previous year activities and commitments are considered to determine technical capacity and program successes and priorities. Priority setting amongst core program activities is often the focus of discussions as well as collaboration across programs. The integrated workplan provides a comprehensive look at the work being performed by ADEQ.

EPA and ADEQ have implemented several changes over the last few years to improve reporting and accountability, and ADEQ has recently converted the integrated workplan into a database format that should improve EPA and ADEQ's ability to track water quality program efforts. In addition, the PPG includes general and program-specific grant conditions, all of which ADEQ met in SFY16.

Staffing: The ADEQ WQD has approximately 125 staff and is constantly recruiting to fill priority vacancies. In SFY16, ADEQ went through a major organization change, absorbing the Compliance Section into the other program sections. Each section now covers both programmatic and enforcement duties.

Rule Making: All agencies in Arizona have been bound by a Governor's rules moratorium since 2009. The Governor's Regulatory Review Council may grant an exception if the regulatory change lessens or eases a regulatory burden. Although this additional requirement creates delays in the rulemaking process, ADEQ has been successful in obtaining exceptions to the moratorium.

EPA Oversight: EPA and ADEQ's partnership is formalized in the Arizona Accord. The Accord is an agreement describing our relationships and joint efforts to protect human health and the environment. This supplements MOAs associated with program approval and delegation. EPA program leads hold regular calls with ADEQ program counterparts as well as official midyear

and end-of-year reviews. EPA Water Division and EPA Enforcement Division work together to oversee program implementation.

The workplan defines outputs and reporting. Review of outputs is by the program. Separate accountability tools are used as well to assess progress, e.g. monthly ICIS reports on permit issuance, or routine program calls. With multiple funding sources, the various grant projects officers also coordinate efforts.

Clean Water Act

Ambient and 106 Monitoring

ADEQ's outputs were close to most of their ambient and 106 monitoring commitments. ADEQ completed 85% of their ambient stream sampling targets, 56% for fish, 108% for lakes, and 93% for groundwater. Explanations were provided for missed targets, primarily due to site access or weather issues. Document deliverables were provided to EPA, including the SFY 16 sampling and analysis plan (SAP), SFY17 ambient monitoring plan, and groundwater basin reports for Salt River. Nutrient monitoring proceeded per the SFY16 SAP. Innovative efforts to develop a recreational monitoring program included the establishment of policies and procedures to identify unsanitary beach conditions and work with land owners and health departments; developing sampling protocols for monitoring streams and lakes for recreation; outreach to possibly impacted groups; and creation of a SAP. The work to complete sampling is ongoing, and EPA looks forward to the continued development of this important recreation and public health effort in future years. Likewise, the intermittent stream monitoring project is a novel effort to develop randomized network of flow sensors to develop intermittent stream target population and map; deploy a random network of flow sensors; begin to identify intermittent stream indicators; and develop protocols and identify applicable labs for the effort. All deliverables were completed on or before the target dates, and the effort will address an important hydrologic issue for water quality management in Arizona. Development of a strategy for monitoring to support the state's 50% waterbody improvement performance measure is still ongoing and will require additional effort in SFY17.

Water Quality Standards

ADEQ was successful in completing a triennial review of Water Quality Standards (WQS). The complete state submittal was received on October 25, 2016. EPA is currently reviewing the new or revised standards, and will act on them within 60 days, per 40 CFR § 131.21(a). ADEQ accomplished this deliverable despite several factors which complicated the rulemaking. The first rulemaking effort was affected by Executive Order 2015-01 (Internal Review of Administrative Rules; Moratorium to Promote Jobs Creation and Customer-Service—Oriented Agencies) leading to a January 23, 2015 cancellation of the oral proceedings. The second effort was terminated on February 19, 2016, in consideration of public notice requirements at 40 CFR § 25.5(b). The third rulemaking effort was completed successfully, after ADEQ obtained a waiver from the aforementioned state executive order. Additionally, the amendments were being developed and revised in the same time period as EPA's rulemaking to update the national WQS regulation. The amended WQS reflect a great deal of effort to update the provisions for net ecological benefit, nutrients, outstanding Arizona waters, salinity standards for the Colorado River, site-specific standards, schedules of compliance, numeric WQS, surface waters and

designated uses. ADEQ's future WQS work may be affected by the lack of a single WQS point of contact since the standards unit manager retired and her staff were absorbed into the Ambient Monitoring Group, as well as the departure from ADEQ of the counsel who managed the triennial review rulemaking. Finalization of ADEQ's Antidegradation Implementation Procedures was rescheduled from SFY14, and the SFY15 final output report states that the procedures were finalized. However, ADEQ staff report that the procedures were not signed as final by the Division Director and haven't been able to provide a copy to EPA, so this deliverable, although no longer being explicitly tracked in SFY16, still cannot be confirmed. In SFY17 EPA looks forward to continued progress in the WQS program. EPA plans to provide support for ADEQ's nutrient criteria development efforts for lakes and streams, coordinate with ADEQ on potential WQS variances, and coordinate with the state on any other emerging issues or priorities for their WQS program.

Water Quality Assessment and Total Maximum Daily Load (TMDL) Development

ADEQ progressed in developing and finalizing their 305(b) Integrated Reports and 303(d) Lists. ADEQ committed to providing the draft to public notice and 45 day rulemaking notice, both of which were completed by June 13, 2016. ADEQ's Total Maximum Daily Load (TMDL) commitments are evaluated with semi-annual status table updates. TMDLs were completed for the Middle Gila (EPA approved December 23, 2015), Granite Creek and Watson Lake (both EPA approved May 4, 2016). For Granite Creek, the initial draft Water Quality Improvement Plan (WQIP) computer modelling of best management practices was completed in the second quarter, but as of the fourth quarter, the draft was under internal review and therefore off target. The TMDL for Pinto Creek Dissolved Copper will be released by ADEQ in early December for a 45-day public comment period. The TMDL for Queen Creek is expected in SFY17. Data collection and analysis for Mule Gulch, San Pedro, and Upper Santa Cruz are ongoing. Mule Gulch was off target after the project manager was reassigned to Gold King Mine spill. The monitoring equipment and weather station were installed, and are awaiting sufficient precipitation to trigger runoff. Likewise, due to a lack of precipitation, volunteers were not able to obtain samples in the Upper Santa Cruz during SFY16 (although they were in the beginning of SFY17, and work on the combined WQIP and TMDL continues with contractor support). The Lyman Lake mercury monitoring is off target since resources were shifted toward focusing additional effort toward the narrative nutrient work. Rainbow Lake met quarterly targets with monsoon sampling in September, lake sampling in the summer and fall, and ADEQ review of data and watershed plans, and additional sampling is expected to be completed in SFY17 monsoon period. A draft Intergovernmental Agreement between ADEQ and Pima County was written to allow ADEQ to install automated equipment in the Cienega Creek Preserve. First flush samplers have been installed in upper Davidson Canyon with autosamplers in mid and lower watershed to be deployed in the first quarter of SFY17.

NPDES Permitting

Highlights

In SFY16, ADEQ continued to issue good quality permits in a timely manner, not only meeting but exceeding the national performance target of 90% current for wastewater discharge permits. As part of their LEAN effort, ADEQ has continued to reduce the time needed to reissue permits. In SFY16, they were able to reissue a permit in 228 days, a 46% reduction from their initial

calculated time of 427 days. They have also recently revised their goal from 213 days to 180 days.

ADEQ reported in their SFY16 output report that 94% of permits are current; however, this estimate does not include the Phase I MS4 individual permits, many of which are backlogged. EPA estimated ~88% current based on permit status data provided by ADEQ and ICIS, which has increased from 82% current in SFY15. This estimate factors in majors, minors, Phase I MS4s, and general permits. According to the SFY16 output report, ADEQ reissued 21, modified 2, and revoked 3 individual permits. ADEQ also worked with EPA to identify and remove approximately 12 terminated permits from the ICIS system that were showing up as backlogged.

A major accomplishment of the Stormwater & General Permits Unit was final issuance of the Phase II MS4 general permit. The Phase II MS4 general permit had been expired since 2007 and covers approximately 41 permittees. The reissuance of the permit was planned for after the 2010 census to include an additional 7 permittees, but was delayed for several years. As a result, EPA included a grant condition in the PPG to require ADEQ to reissue the permit by September 30, 2016. Leading up to that date, the permit was challenged by permittees, obliging ADEQ to hold additional stakeholder meetings and a second public notice and hearing in January 2016, but ADEQ ultimately met the grant condition deadline. ADEQ also reissued the Deminimus general permit, reviewed 7 Phase I annual reports, and through its contractor, completed 8 Phase II MS4 audits.

Concerns

Multi-sector General Permit (MSGP): Reissuance of the multi-sector general permit was a priority for SFY16; however, it was pushed back due to challenges ADEQ received from permittees on the Phase II MS4 general permit reissuance and the associated workload. The Stormwater & General Permits Unit has only three staff permit writers, of which, two are working on their first ever permit. As a result, EPA negotiated new milestones for ADEQ's reissuance of the multi-sector general permit for SFY17. EPA continues to encourage ADEQ to prioritize reissuance of this permit, which covers more than 1,000 permittees.

Phase I MS4s: Currently, seven (7) of the eight (8) Phase I MS4 permits are expired. ADEQ plans to combine coverage of these dischargers into one (1) general permit after the MSGP is reissued. This high number of backlogged Phase I MS4 permits greatly impacts ADEQ's ability to meet the national performance target of 90% permits current and EPA is concerned that the Stormwater & General Permits Unit may not be adequately staffed to address this backlog.

ICIS Permit Status Information: As in SFY15, the ICIS database does not include a complete list of general permits with issuance dates. ADEQ has begun addressing this issue and has recently identified a fatal flaw in the communications between their database and ICIS. They have been successful in flowing this information in test mode, and expect to soon resolve the flow in production mode. EPA encourages ADEQ to update this information so that ADEQ can receive national credit for their accomplishments.

Non Point Source (NPS) Program and Project (CWA 319) Management

The Watersheds Protection Unit in the Surface Water Section has the majority of the Nonpoint Source Program (NPS) under its scope, whereas, other parts of ADEQ's Water Division uses some of the funds to staff NPS related work. The Program is comprised of program implementation and project oversight. Program implementation is based on a State Management Plan (SMP) which establishes goals, objectives, activities, and milestones to accomplish the goals. Accomplishments are detailed in an Annual Nonpoint Source Program Report and an end of year integrated Water Division report. Project oversight includes the solicitation for project proposals, awarding projects, and oversight of projects to improve water quality.

The Watersheds Protection Unit continues to lead the way amongst Region 9 states on working with partners and program integration. The agreements and MOU's in place to leverage and align federal and state resources are tremendous. EPA anticipates that ADEQ will show significant results in the next two years on meeting its performance measure of "showing improvement in 50% of the states monitored waters." According to the NPS Annual Report, ADEQ has documented improvements in 74% of the Master Targeted List waters.

State fiscal year 2016 was the second year of implementing the NPS 5-Year Management Plan (Plan). This year it was reported that ADEQ was successful in staying on track of meeting 89% of their Plan milestones. Missed targets in the Plan are understood to be behind and are within reason for delay. ADEQ has demonstrated a commitment to get on track. Furthermore, EPA would like to commend the work with ADEQ on completing the EPA Performance Measure reporting for SP-12 and WQ-10. EPA has submitted 14 SP-12's and 14 WQ-10's to HQ's. ADEQ has a well thought out plan for tracking ADEQ's performance measure: 1) Waterbody is removed from 303(d) list, 2) Order of magnitude decrease in pollutant concentrations, or 3) Increase in Water Quality Index Score (WQI).

At the end of year meeting, EPA/ADEQ identified 5 action items:

- 1. Grants: ADEQ has 7 open CWA 319 grants with an average 46% unliquidated obligation (ULO) balance. EPA will work with ADEQ on reducing the number of open grants and reducing the ULO balance by more frequent sub-contract reimbursement requests.
- 2. Completing the Hillside Mine project spring of 2017,
- 3. Updating the Plan to reflect changes in milestone timeline, and
- 4. Drafting the Upper Santa Cruz River Clean Water Plan this Fiscal Year.

All in all, the Watersheds Protection Unit continues to strive to meet its performance measure, checking that the goals are being worked towards, and that the supporting milestones are completed. EPA looks forward to more great work from ADEQ as it moves towards showing improvement in water quality in Arizona.

Clean Water Act 604(b)

In Arizona, Clean Water Act 604(b) grant funds are solely used to update Clean Water Act 208 Water Quality Management Plans (WQMP) and one ADEQ staff. In SFY 2016, EPA received

three requests to approve State certifications of WQMP updates. While all of the certifications were approved, not all met the "update" threshold for EPA certification approval. EPA and ADEQ discussed this during the midyear programmatic review, ADEQ acknowledged the 208 burden and suggested that ADEQ and EPA look at LEANing the process or program. EPA encourages ADEQ to broaden the use of 604(b) funds, as the CWA 604(b) can be used to "...carry out planning under sections 205(j) and 303(e)...." EPA appreciates the opportunity to improve the CWA 604(b) program, and looks forward to implementing the LEAN process with ADEQ and our partners in Arizona.

Wetlands and 401

EPA reviewed the SFY16 Final Output Report regarding 401 CWA actions. There is one Task 1.3.2: CWA 401 Certification Review of Federal Permits and Licenses. The deliverables require a table of the 401 certifications processed including the type of permit, project name, action and date of action. ADEQ complied with Task 1.3.2 and provided a table of 401 actions.

In order to improve interagency coordination and collaboration, a condition in the SFY16 grant required ADEQ to contact EPA prior to 401 certification on projects where EPA has identified water quality concerns through written or phone correspondence to ADEQ. This condition has been continued in the SFY17 grant. Implementation of the grant condition to date has resulted in improved interagency coordination through sharing of project specific information and expertise. This has resulted in better informed decision-making at the state and federal level.

Border

In FY16, ADEQ continued to be an effective EPA partner on water quality issues in the Arizona border region.

ADEQ's Office of Border Environmental Protection (OBEP) has long been a vocal advocate for the need for an improved pretreatment program in Nogales, Sonora, to reduce impacts on the Nogales International Wastewater Treatment plant in Rio Rico, AZ. In FY16 this included collaboration with the Border Environment Cooperation Commission and its contractor on the development of a pretreatment toolkit for border communities and a training on the development of a municipal pretreatment program for wastewater discharges to a publicly-owned treatment works.

ADEQ has regularly shared its observations and recommendations on wastewater quality protection and operations and maintenance of existing infrastructure. In FY16, this included producing a second case study on stormwater challenges in Ambos Nogales, which included recommendations for BEIF grant conditions.

ADEQ has been an active participant in Binational Technical Committee meetings. In FY16, ADEQ engaged with binational partners on many issues, including concerns about the potential impact of a slug discharge of metals to the wastewater conveyance should it occur at the same time as a sanitary sewer overflow.

CWA Enforcement and Compliance

Inspections: The Water Quality Surface Water Section (formerly the Water Quality Compliance Section and the Southern Regional Office Compliance Program Unit) is responsible for all surface water enforcement and compliance work for the Division. ADEQ set a target of inspecting 50% of the major AZPDES permitted facilities (35 of 71) and 20% of the minor facilities (18 of 89) in SFY16. EPA's 2014 Compliance Monitoring Strategy (CMS) requires the inspection of majors once every two years (50%) and all minors inspected once in a 5 year cycle (20%). ADEQ inspected 35 major facilities and 28 minor facilities, thus meeting the CMS goal for major facilities and exceeding the CMS goals for minor facilities. Additionally, ADEQ responded to 15 citizen complaints related to the Clean Water Act, resulting in 30 non-routine inspections. ADEQ had a target of conducting 6 sanitary sewer inspections in the workplan, but failed to conduct the inspections. ADEQ stated they still need to develop their sanitary sewer inspection program and they hope to meet their SFY17 targets. ADEQ still intends to pursue a risk-based ACMS (subject to compliance with EPA's 2014 CMS) in response to the AZ Auditor General's Report citing non-compliance by minors.

ADEQ fell short meeting its stormwater inspection targets of 50 industrial and 50 construction (30 Phase 1 and 20 Phase 2) inspections in SFY16 by conducting 46 industrial and 36 construction inspections (27 Phase 1 and 9 Phase 2). ADEQ attributed its shortfall in stormwater inspections to key staff turnovers. Although EPA's CMS sets goals of 10% of all industrial facilities and 5-10% CMS goals for construction facilities, EPA has agreed to lower commitments given the resource limitations at ADEQ. The CMS goals for the stormwater programs also include audits of MS4s. See the NPDES Permitting Section of this report for a discussion of SFY16 progress in the MS4 program.

AZ has 100 CAFOs statewide covered by AZ APP permits and 2 subject to AZPDES permits (requiring inspection once in a 5 year cyle). ADEQ exceeded its SFY16 target of no CAFO inspections by conducting 2 CAFO inspections of its unpermitted facilities.

ADEQ fell slightly short in meeting its SFY16 inspection targets for the biosolids program (5 POTWs and 6 land application facilities) with 5 POTWs and 5 land application facilities inspections. ADEQ cited key staff turnover in September 2015 for the shortfall, but now that the position has been filled, they expect to meet their SFY17 target of 11 biosolids inspections. ADEQ exceeded its target of 28 annual report reviews submitted under the biosolids rule by conducting 31 reviews. ADEQ will keep their hard-copy biosolids annual report format for the near future. California POTWs that send biosolids to Arizona will need to file hard copy reports with ADEQ, and electronic reports with EPA. ADEQ did not identify any biosolids violations or reasons to take enforcement actions in SFY16.

Pretreatment Program: Arizona has delegated authority to implement the federal pretreatment regulations. Core regulatory duties are as follows:

- 1) Review all annual and semi-annual reports submitted by POTWs with approved pretreatment programs.
- 2) Conduct pretreatment compliance audits (at least once every five years for each approved POTW pretreatment program).

- 3) Conduct pretreatment compliance inspections (at least twice every five years for each approved POTW pretreatment program).
- 4) Perform annual inspections of POTWs with SIU-oversight-only pretreatment programs (at least once every five years for each program).
- 5) Review and approve pretreatment program submittals and modifications.

Additionally, there is a specific PPG target for ADEQ to support pretreatment work in the Ambos Nogales border region, as industrial wastewater from Mexico has caused or contributed to NPDES permit violations at the Nogales International Wastewater Treatment Plant (NIWTP). During SFY16, ADEQ continued enforcement efforts to compel the International Water Boundary Commission to meet the pretreatment requirements in the NIWTP NPDES permit, and continued to work with wastewater representatives in Nogales, Arizona, and Nogales, Sonora, to support implementation of the pretreatment conditions in the NIWTP NPDES permit.

During SFY16, Arizona met or exceeded all of their pretreatment targets. Specifically, ADEQ exceeded its inspection targets (9 compliance inspections and 3 POTW SIU-oversight only inspections), and met its auditing targets (4 pretreatment audits of approved pretreatment programs) and report review targets (20 annual/semi-annual reports). By streamlining pretreatment audit and inspection report writing using standardized report templates, ADEQ doubled its yearly inspection and audit commitments.

In SFY17, EPA looks forward to ADEQ's continued progress in pretreatment commensurate with its target numbers.

Data Management and Reporting: ADEQ's inability to flow data into ICIS from mid-November 2012 significantly impacted EPA's ability to monitor and evaluate ADEQ's Surface Water Compliance and Enforcement program through SFY15. As a result, EPA included two programmatic grant conditions regarding data management and reporting in the SFY16 Work Plan:

P8. Arizona will complete all upgrades and successful installation of the Nodes to start the flow of data from Azurite to ICIS Production by **September 30, 2015**. Arizona will provide EPA with written notification upon completion.

P9. Arizona will flow accurate and complete data from Azurite to ICIS Production by **October 31, 2015**. At least 95% of permit limits and DMR data for major facilities shall be entered. Arizona will use standardized or Ad-Hoc ICIS reports to verify the completeness of this data starting November 1, 2012 onwards. Arizona shall generate and provide to EPA electronic copies of these reports by October 31, 2015 and upon request.

ADEQ met both grant condition deadlines and EPA began using ICIS data on October 1, 2015 to monitor and evaluate ADEQ's Surface Water Compliance and Enforcement program as detailed in Task 1.4.3 of the integrated SFY16 Work Plan.

Enforcement: With data flowing into ICIS, EPA resumed generating automated Quarterly Noncompliance Reports (QNCR), starting with the period of October 1, 2015 through December

31, 2015. The QNCR provides detailed NPDES compliance status for major permittees. Major facilities are flagged as being in Significant Noncompliance (SNC) if they have acute or chronic effluent limit violations that exceed EPA's criteria for magnitude and duration. Major facilities may also be flagged as SNC for late submittal of discharge monitoring reports. Flagging SNC violations is an important tool for targeting enforcement to the highest priority violations. State enforcement response to SNC violations is a critical measure that EPA uses in our oversight of State NPDES enforcement programs.

In SFY16, ADEQ issued 1 Administrative Order (AO), closed 3 AOs, issued 22 Notices of Opportunity to Correct (NOCs) and Notices of Violation (NOVs) and closed 35 NOCs and NOVs. While the SFY16 enforcement numbers represent a decline from ADEQ's SFY15 numbers (5 AOs issued, 6 closed; 44 NOCs/NOVs issued, 37 closed), EPA expects ADEQ's enforcement compliance to increase in SFY17 given that their SFY16 internal enforcement reorganization has been completed.

Safe Drinking Water Act

EPA Region 9's Drinking Water Management Section (EPA) conducted the annual end of year program evaluation of the Arizona Public Water System Supervision (PWSS) Program on October 4, 2016. This program evaluation covers ADEQ Water Quality Division (WQD) Drinking Water (DW) activities for SFY16, July 1, 2015 through June 30, 2016, funded in part by SDWA Section 1443(a) Grants to States and Section 1452(g) State Revolving Loan Funds. In SFY16 ADEQ only used \$600k of their total PWSS grant allotment. In SFY17 they are moving from using grant funds from two Federal Fiscal Year (FFY) to being "forward-funded." They will use the full FFY16 PWSS grant in SFY17.

ADEQ begins its first year of collecting fees for Operator Certification renewals with all monies going to the general fund. A.A.C. R18-5-103 establishes a certification committee of eleven members to make recommendations and provide technical advice. ADEQ has considered to disband this stakeholder committee, an action that would require a new Attorney General's certification and will be considered backsliding unless this reduction can be justified by ADEQ and is approved by EPA. Stakeholder involvement is important to the public health objectives of the program is one of the nine baseline standards.

ADEQ DW Section gained a compliance and enforcement unit during the re-organizational changes in SFY16. The DW Section has been recruiting and retaining staff throughout SFY16 and expect to be fully staffed in SFY17.

Rule Development

The DW Section committed to submitting a complete primacy revisions crosswalk in their SFY13 workplan for all the analytical requirements of 40 CFR 141 and 142. The DW Section's work with ADHS on this effort was curtailed SFY14 year due to the lack of Section manager. As a result, the DW Section completed no work on the incremental primacy crosswalks for Public Water System (PWS) Definition, Arsenic and Radionuclides. Instead, DW Section has focused on Revised Total Coliform Rule (RTCR) development. The DW Section will continue to

complete the incremental primacy crosswalks for Stage 1 and Stage 2 Disinfection Byproduct rules originally due to EPA in SFY14.

Rule Implementation

EPA has seen ADEQ address their resource challenges in SFY16. The DW Section has hired new compliance assistance managers to support proper data entry and compliance determinations. ADEQ has extended the county delegation agreements for Maricopa and Pima counties through year 2050. The counties perform on-site inspections/sanitary surveys and address compliance with formal enforcement actions on systems for which ADEQ delegates authority. ADEQ in partnership with the counties completes sanitary surveys to meet National Program measure SDW-1(a) for sanitary surveys. The state has completed 97% of the required number of sanitary surveys for SFY16 to meet National Program measure SDW-1(a) for sanitary surveys performed at a community water system every three years. ADEQ's Compliance Section has reduced the "total" number of priority systems on the ETT over the course of the year. The Compliance Section has not been able to address all the systems that were priority systems on the July 2015 ETT to meet their deliverable in the SFY16 workplan. The SFY16 Enforcement Targeting Tool (ETT) performance is shown in the table below.

SFY16 Enforcement Targeting Tool (ETT) performance

	Q1	Q2	Q3	Q4
Total # of Systems on ETT >=11	58	50	49	33
Total PWS removed from ETT in SFY16	-	12	28	50
Remaining PWS on ETT >=11 from SFY16 ETT commitment	58	46	32	23

Outreach, Training and Emergency Response

In SFY16 ADEQ expanded their operator workshop to target water system managers. They hold focused training for operator certification preparation along with the drinking water regulations across the state. ADEQ will be focused on implementing the RTCR. Systems will be reaching out to ADEQ for more clarity and would benefit having an individual to contact directly. ADEQ WQD staff provides compliance assistance to systems with little support from third party technical assistance (TA) providers. EPA encourages ADEQ to use external resources including those TA providers for which the EPA TA grant allows states to set priorities.

ADEQ has not invested in Security and Emergency Response training events since the elimination of separate federal grant funding for water security activities in SFY12. Operators across the state depend on EPA, FEMA and the Maricopa County Waterborne Disease Taskforce sponsored training for emergency response preparedness activities. ADEQ will continue to rely on AZ Water/Wastewater Agency Response Network (WARN) and other utility based networks to respond to large wildfires and other emergency events.

Laboratory Certification and Quality Assurance (QA)

TestAmerica Laboratories Inc. has replaced Arizona Department of Health Services (ADHS) as the principle state laboratory through a contractual agreement valid until 2019. ADHS remains

the laboratory certification agency for drinking water labs within the state of Arizona. EPA Region 9's QA office is planning to create a template document for help states update their QAPrPs. ADEQ does not have changes to the Drinking Water Quality Assurance Program Plan (QAPrP) planned for in future workplans.

New and Existing System Capacity Development

The Capacity Development program has not changed significantly since ADEQ first developed it in 1999. Through their partnership with the Arizona Water Infrastructure Finance Authority (WIFA), ADEQ provides Operational Technical assistance to systems. As a partner in the Rural Water Infrastructure Committee, ADEQ reviews potential TA funding resources with federal, state and third party TA providers. Through System Evaluations, ADEQ is supporting systems to come into compliance or develop more sustainable operation practices that maintain compliance with the SDWA. ADEQ has completed their development of a Small Water Systems Compliance Plan. This living document will give them a strategy moving forward on how to work with other state agencies to improve compliance with the SDWA.

Findings and Recommendations:

1. The Drinking Water Section needs to complete the primacy revision packages for Revised Total Coliform Rule, and Primacy crosswalk of ADHS sections of Arizona Administrative Code.

Data Management

Current system: The DW Section upgraded to SDWIS/State Version 3.33 and FedRep 3.5 in FY16 and now reports conducting compliance determination using SDWIS/State modules for all rules including the Revised Total Coliform Rule. This should help ensure accurate compliance determinations and consistent violation posting.

Future system upgrades: At the end of FY16, EPA released the Compliance Monitoring Data Portal (CMDP), a component of the next major version of SDWIS, SDWIS/Prime, that supports electronic transfer of laboratory results from drinking water sample analysis, to the first group of adopting primacy agencies, and EPA is now accepting expressions of interest in joining the next phase of the CMDP rollout. However, DW Section has reversed course from a year ago and now says it has no plans to adopt CMDP due to lack of information and increased IT requirements for labs and utilities. This decision could delay DW Section adoption of CMDP and eventual transition to SDWIS/Prime as well as the participation of interested labs and utilities in a potentially more efficient process for reporting monitoring results. EPA has recently made available a CMDP "knowledgebase" collection of technical and user documents that could give DW Section with a better understanding of CMDP functionality and provide for more informed planning for data management system and process improvements going forward.

Upload data quality status: The DW Section has achieved a low error rate for quarterly inventory and actions data uploads to SDWIS/Fed and has had no data errors for samples uploads for several years. ADEQ has negligible locational data and active-but-unreported facility errors and low numbers of the facility flow errors that are common in primacy agency reporting to SDWIS/Fed. For actions, the DW Section had reduced historically high duplicate violation

errors to near minimal levels until the most recent quarter, when they rose again to a notable level.

Persistent data quality issues: The DW Section has reported prioritizing data quality issues including the number of open-ended violations older than five years -- mostly CCR and LCR violations – and these numbers have been declining; analysis of these issues for FY16 in not yet done but hopefully this trend continues. The DW Section has also reportedly reviews water systems serving over 3300 population that have not had 90th percentile lead levels reported to SDWIS/Fed in the last three years, to determine the cause of the missing data; the current completion rate is 96.4 percent, up from 92 percent at mid-year.

OGWDW measures: According to the Data Quality Matrix in the SDWIS Reporting Services function in CDX, ADEQ has zero or negligible numbers of issues in inventory data and a very high combined inventory scores. ADEQ also has very few violation deletions and a high .9994 score for that category. ADEQ's .8497 score on timeliness of violation reporting pulls the overall Matrix score down to .9748, leaving some room for improvement, but overall these measures and the others indicate good data quality in reporting to SDWIS/Fed.

Source Water Protection

Protection: In FY16, the ADEQ SWP Program completed seven source water protection plans: five school plans (non-community water systems) and two community water system plans. The Program continues to work with ADEQ's UST program to conduct VOC evaluations on public water systems; twenty-eight reviews were conducted in the past year. Nine LUST sites have been re-opened for additional investigation or not closed due to these evaluations.

Outreach: Eleven SWP educational outreach events were held in FY16. These events targeted system owners and operators to voluntarily develop and implement SWP plans. The Program maintains its commitment to prioritizing source water protection for schools providing drinking water. These systems typically exhibit the highest risk and have extremely limited resources for protection development and implementation.

Integration: The Program integrated with ADEQ's Clean Water Act programs by incorporating GIS maps of 5/10/15 year time of travel contaminant delineations into the Surface Water Division data base. Groundwater GIS layers identifying elevated nitrate concentrations were developed based on PWS new source sampling data; this information will help target funding for protection activities and BMPs to threatened aquifers. Funding guidelines for the nonpoint source grants program were amended to include groundwater protection criteria. The Program meets annually with the U.S. Department of Agriculture to coordinate protection activities with water systems.

Summary: Since the Program's inception, SWP Plans have been completed for 49 public water systems throughout Arizona; 11 of these are community water systems. To date, over 250 BMPs have been implemented to protect drinking water. Risk to public health has been reduced in 40.5% of community water systems serving 86.3% of the population in Arizona.

Ground Water Program

ADEQ does not have an EPA-approved Underground Injection Control (UIC) State permitting program. ADEQ's Aquifer Protection Permit (APP) program shares information with EPA's UIC program on UIC regulated sites that are also subject to state APP permitting. Sharing of information and regular updates allows EPA to improve on the Federal oversight and our permitting process, where appropriate.

ADEQ has shared information with us specifically on the permitted Morton Salt facility, the Excelsior Gunnison Copper Project, and the proposed Florence Copper Production Test Facility (PTF). The proposed Gunnison Project is under consideration for both a federal UIC permit and an APP. During our EOY discussion, we discussed the status of the projects. EPA requested the briefs submitted to the Arizona Water Quality Appeals Board for the PTF APP appeal. ADEQ provided the documents in an email follow up after the EOY meeting.

ADEQ also works with Arizona Department of Water Resources (ADWR) to evaluate potential for adverse impacts to groundwater quality from recharge injection wells or recharge basins. Recharge is a means of storing excess water supplies underground so that they may be used in the future. ADWR encourages treated wastewater to be reused in this way to replenish groundwater supplies. Both ADWR and ADEQ's APP program have permitting requirements for injection of treated wastewater used for aquifer recharge and recovery. ADEQ's APP program evaluates these projects and requires an APP, unless exempted, to protect the receiving aquifer from potential contaminants. EPA's UIC receives information from ADEQ on the reviews of these recharge projects to ensure that the injection of treated wastewater meets our UIC requirements for Class V injection wells. As discussed during the EOY, ADEQ inadvertently left out the status information in the EOY report. The updated information on the latest projects were provided in a follow up email from ADEQ.

In addition to coordinating on permitting projects, ADEQ has provided annual updates to EPA of its drywell (Class V injection wells) database for EPA's national UIC database. A person, who owns an existing or proposed drywell in Arizona, must register the drywell with ADEQ. ADEQ's APP Program evaluates these wells to determine the need for a general APP to protect Arizona aquifers that serve as drinking water sources. EPA also requires owners/operators of injection wells (ie, drywells or any other Class V injection well), which are "authorized by rule" pursuant to the Class V UIC requirements, to submit inventory information for the federal database. The drywell update from ADEQ ensures that our UIC database is up-to-date for this type of well. As a follow up to the end of year meeting, ADEQ provided the drywell information to our database manager.

Drinking Water Enforcement

The EPA FY 2016 OECA Annual Commitment System (ACS) commitment for drinking water requires that states address the number of priority systems equal to the number of its Public Water Systems (PWSs) that have a score of 11 or higher on the July 2015 Enforcement Targeting Tool (ETT) report by issuing a formal enforcement action or verifying return to compliance. Systems with an ETT score of 11 or higher, with unaddressed violations for more than six months are potential candidates for escalated enforcement actions. ADEQ's success at addressing violations is tracked by means of the quarterly ETT reports. At the beginning of July

2015, there were 58 facilities, each identified with a score of 11 or higher. As of July 2016, 23 of these water systems remained on the EPA ETT report, based on ADEQ's SFY16 ETT commitment. EPA understands that ADEQ has in SFY 2016 implemented a new state-operated ETT system by the name of "ETT Live." Per ADEQ, "ETT-Live" will provide more accurate updates to the ETT scores.

ADEQ issued 143 informal enforcement actions (Notices of Opportunity to Correct [NOCs] and/or Notices of Violations [NOVs]) to water systems to address non-compliance issues. ADEQ closed 144 NOCs/NOVs in SFY 2016. ADEQ issued 9 administrative orders. Six administrative orders were closed when the water systems returned to compliance in SFY 2016.

ADEQ is tracking 12 water systems with arsenic MCL violations. ADEQ returned to compliance 13 systems since April 2015. In April 2015, ADEQ originally reported 20 systems with arsenic MCL violations. Since this time, 2 systems were added to the original list (White Hills and Thunderbird Farms, DWID). ADEQ and EPA are continuing to meet monthly to review and discuss ADEQ's progress on addressing the remaining 12 water systems with arsenic MCL and we meet quarterly to discuss the latest ETT list.

The total target number for sanitary surveys in SFY 2016 was 383. ADEQ conducted and completed 380 sanitary surveys. The remaining surveys that were scheduled for SFY 2016 but not completed, ADEQ will complete them by the first quarter of SFY 2017. All systems due for sanitary surveys in calendar year 2016, ADEQ will complete them by December 31, 2016.

The Southern Regional Office Compliance Program Unit (SRO) in Tucson is responsible for sanitary surveys, compliance and enforcement and works closely with the Drinking Water Section in Phoenix, AZ. SRO completed 97 sanitary surveys in SFY 2016. ADEQ also investigated 38 complaints related to drinking water.